

L Number	Hits	Search Text	DB	Time stamp
-	2	423/155,158,160,161,165,430,432.ccls. and calcium and ((precipitat\$3 near3 "calcium carbonate") or pcc) and channel and ("carbon dioxide") or CO?sub.2) and (("calcium carbonate") or (Ca adj CO?sub.3))	USPAT; US-PGPUB	2002/11/18 14:15
-	35	423/155,158,160,161,165,430,432.ccls. and calcium and ((precipitat\$3 near3 "calcium carbonate") or pcc) and ("continuous" or (semi adj continuous)) and ("carbon dioxide") or CO?sub.2) and (("calcium carbonate") or (Ca adj CO?sub.3))	USPAT; US-PGPUB	2002/11/15 16:01
-	1	("6416727").PN.	USPAT; US-PGPUB	2002/11/18 14:15
-	1	WO-9206038-\$.did.	USPAT; US-PGPUB;	2002/11/18 15:52
-	2	WO-9623728-\$.did.	EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/11/18 15:48

?ds

Set	Items	Description
S1	17146	(CALCIUM OR CA OR MONOCALCIUM) () (CARBONATE OR CO3 OR MONOCARBONATE) OR CALCITE OR CaCO3 OR CARBONIC()ACID() (CALCIUM OR - CA) () SALT OR CHALK
S2	4903	(CALCIUM OR CA) () (HYDROXIDE OR OH2 OR HYDRATE OR DIHYDROXIDE) OR CaOH2 OR (HYDRATE? OR SLAKE? OR MILK OR WATER OR H2O) (-N)LIME OR CARBOXIDE OR HYDRALIME
S3	29924	(CARBON OR C) () (DIOXIDE OR O2 OR OXIDE) OR DRY()ICE OR CARBONIC()ACID() (ANHYDRIDE OR GAS) OR CARBONIC()ANHYDRIDE OR CO2
S4	1316	S1(3N) (PRODUC? OR PROD? ? OR GENERAT? OR MANUF? OR MNFG? OR MFG? OR MFR? OR CREAT? OR FORM?? OR FORMING? OR FORMAT? OR MAKE? ? OR MADE? ? OR MAKING?)
S5	380	S1(3N) (SYNTHESI? OR PREPAR? OR PREP? ? OR PRPN?)
S6	875	S1(3N) (PRECIPITAT? OR PPT OR PPT? ?)
S7	312	S2(3N) (SUSPENS? OR DISPERS? OR COLLOID? OR EMULS? OR MICRO-EMULS? OR SLURR?)
S8	127	S2(3N)SUSPEN?
S9	2501	S1(10N) (AQ? ? OR AQUEOUS OR WATER OR H2O OR LIQ OR LIQUID? OR SOLUTION? OR SOLN? ?)
S10	12	S4-S5(S)S6(S)S7-S8
S11	3	S10(S)S9(S)S3
S12	2	S11 AND S4-S5/TI,AB,CM

?t12/5,k

12/5,K/1

DIALOG(R)File 348:European Patents

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00932538

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

**The production of slaked lime**

**Verfahren zur Herstellung von geloschtem Kalk**

**Procede de fabrication de chaux eteinte**

PATENT ASSIGNEE:

ECC INTERNATIONAL LIMITED, (287622), 1015 Arlington Business Park,  
Theale, Reading, Berkshire RG7 4SA, (GB), (applicant designated states:  
DE;DK;FI;FR;GB;IT;SE)

INVENTOR:

Golley, Christopher Robin Langdon, Ecc Int. Ltd., John Keay House, St  
Austell, Cornwall PL25 4DJ, (GB)

Kostuch, Jacek Antoni, Ecc Int. Ltd., John Keay House, St Austell,  
Cornwall PL25 4DJ, (GB)

Purdey, John Anthony, Ecc Int. Ltd., John Keay House, St Austell,  
Cornwall PL25 4DJ, (GB)

LEGAL REPRESENTATIVE:

McCormack, Derek James (48153), ECC International Ltd, Patents  
Department, c/o John Keay House, St Austell, Cornwall PL25 4DJ, (GB)

PATENT (CC, No, Kind, Date): EP 849236 A1 980624 (Basic)

APPLICATION (CC, No, Date): EP 97310211 971217;

PRIORITY (CC, No, Date): GB 9626557 961220

DESIGNATED STATES: DE; DK; FI; FR; GB; IT; SE

INTERNATIONAL PATENT CLASS: C04B-002/10

ABSTRACT EP 849236 A1

A method of producing an aqueous suspension of calcium hydroxide which comprises passing a gaseous flow incorporating particles of calcium carbonate through a calcining furnace thermally to decompose the calcium carbonate, delivering a flow of the decomposition products formed in the furnace comprising calcium oxide particles suspended in gas comprising carbon dioxide to a vessel wherein the calcium oxide particles are contacted with water to produce an aqueous suspension of calcium hydroxide and separating the aqueous suspension from the said gas.

ABSTRACT WORD COUNT: 82

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 980624 A1 Published application (A1with Search Report  
;A2without Search Report)

Examination: 980624 A1 Date of filing of request for examination:  
971229

Examination: 990120 A1 Date of despatch of first examination report:  
981208

Change: 990310 A1 Designated Contracting States (change)

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9826	575
SPEC A	(English)	9826	2734
Total word count - document A			3309
Total word count - document B			0
Total word count - documents A + B			3309

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...SPECIFICATION the decomposition and comprises a suspension of calcium oxide particles in a gaseous flow comprising **carbon dioxide** and other gases including oxygen, nitrogen and water vapour. The gaseous flow is passed through...

...second scrubber 11 is fed to a gas/liquid separator 13 which produces a gaseous **carbon dioxide** -containing output which is delivered via the heat exchanger 5 to an output line 15...

...line 33 to a reactor 35 in which the slurry is carbonated by input of **carbon dioxide** -containing gas supplied via the line 15. An **aqueous** slurry containing **precipitated calcium carbonate** produced in the reactor 35 is delivered to a buffer tank 37 where it is stored...

...CLAIMS output line from the recirculation loop to a reactor in which it is employed to **produce** a precipitated **calcium carbonate** by reaction with carbon dioxide.

12. A method as claimed in claim 11 and wherein...

...or semi-continuous process for the production and slaking of calcium oxide and the direct **formation** of precipitated **calcium carbonate** from the slaked lime so produced by reaction with carbon dioxide.

?

Set	Items	Description
S1	17146	(CALCIUM OR CA OR MONOCALCIUM) () (CARBONATE OR CO3 OR MONOCARBONATE) OR CALCITE OR CaCO3 OR CARBONIC()ACID() (CALCIUM OR -CA) ()SALT OR CHALK
S2	4903	(CALCIUM OR CA) () (HYDROXIDE OR OH2 OR HYDRATE OR DIHYDROXIDE) OR CaOH2 OR (HYDRATE? OR SLAKE? OR MILK OR WATER OR H2O) (-N)LIME OR CARBOXIDE OR HYDRALIME
S3	29924	(CARBON OR C) () (DIOXIDE OR O2 OR OXIDE) OR DRY()ICE OR CARBONIC()ACID() (ANHYDRIDE OR GAS) OR CARBONIC()ANHYDRIDE OR CO2
S4	1316	S1(3N) (PRODUC? OR PROD? ? OR GENERAT? OR MANUF? OR MNFG? OR MFG? OR MFR? OR CREAT? OR FORM?? OR FORMING? OR FORMAT? OR MAKE? ? OR MADE? ? OR MAKING?)
S5	380	S1(3N) (SYNTHESI? OR PREPAR? OR PREP? ? OR PRPN?)
S6	875	S1(3N) (PRECIPITAT? OR PPT OR PPT? ?)
S7	312	S2(3N) (SUSPENS? OR DISPERS? OR COLLOID? OR EMULS? OR MICRO-EMULS? OR SLURR?)
S8	127	S2(3N)SUSPEN?
S9	2501	S1(10N) (AQ? ? OR AQUEOUS OR WATER OR H2O OR LIQ OR LIQUID? OR SOLUTION? OR SOLN? ?)
S10	12	S4-S5(S)S6(S)S7-S8
S11	3	S10(S)S9(S)S3
S12	2	S11 AND S4-S5/TI,AB,CM
S13	171258	MIX OR MIXE? ? OR MIXING OR BLEND? OR ADMIX? OR COMMIX? OR IM MIX? OR INTERMIX? OR DOPE? ? OR DOPING
S14	10998	S13(3N) (SERIES OR MULTI OR MANY OR SEVERAL OR PLURALITY OR MULTITUD? OR MULTIPLE OR PLURIF? OR GROUP? OR SET OR NETWORK? OR SUCCESSION OR SEQUEN? OR CONSECUTIV?)
S15	399	S4-S5(S)S13-S14
S16	16	S15(S)S2(S)S3
S17	7	S16 AND S4-S5/TI,AB,CM
S18	6	S17 NOT S12

?t18/5,k/all

**18/5,K/1**

DIALOG(R)File 348:European Patents

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00999302

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

**Process for preparing coated printing paper**

**Verfahren zur Herstellung von beschichtetem Druckpapier**

**Procede de preparation de papier couche pour l'impression**

PATENT ASSIGNEE:

NIPPON PAPER INDUSTRIES CO., LTD., (306803), 4-1, Ohji 1-chome, Kita-ku, Tokyo, (JP), (applicant designated states:

AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

Nishijima, Eiji, c/o Nippon Paper Ind. Co.,Ltd, Iwakuni Res. Lab. of Tech., 8-1 Iidamachi 2-chome, Iwakuni-shi, Yamaguchi-ken, (JP)

Nanri, Yasunori, c/o Nippon Paper Ind. Co.,Ltd, Iwakuni Res. Lab. of Tech., 8-1 Iidamachi 2-chome, Iwakuni-shi, Yamaguchi-ken, (JP)

Sato, Yuji, c/o Nippon Paper Ind. Co.,Ltd, Iwakuni Res. Lab. of Tech., 8-1 Iidamachi 2-chome, Iwakuni-shi, Yamaguchi-ken, (JP)

Miyawaki, Shoichi, c/o Nippon Paper Ind. Co.,Ltd, Iwakuni Res. Lab. of Tech., 8-1 Iidamachi 2-chome, Iwakuni-shi, Yamaguchi-ken, (JP)

LEGAL REPRESENTATIVE:

Smaggasgale, Gillian Helen et al (76891), Mathys & Squire, 100 Gray's Inn Road, London WC1X 8AL, (GB)

PATENT (CC, No, Kind, Date): EP 902123 A2 990317 (Basic)

APPLICATION (CC, No, Date): EP 98307350 980911;

PRIORITY (CC, No, Date): JP 97249078 970912; JP 97263943 970929

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: D21H-019/38;

ABSTRACT EP 902123 A2

A process for preparing a coated printing paper by applying a coating solution containing a pigment and an adhesive to a base paper, which comprises coating the base paper with the coating solution containing 30 to 90% by weight, based on 100% by weight of pigment components, of rice grain- or spindle-shaped precipitated calcium carbonate as a pigment component, the precipitated **calcium carbonate** being **produced** by slaking calcium oxide with a white liquor, followed by causticization with a green liquor, at a causticizing step during pulp production by the sulfate process or the soda process; whereby the coated printing paper free from uneven gloss, mottling, and trapping unevenness, and excellent in ink drying properties and operability with a blade coater is provided.

ABSTRACT WORD COUNT: 123

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 990317 A2 Published application (Alwith Search Report  
;A2without Search Report)

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9911	344
SPEC A	(English)	9911	4622
Total word count - document A			4966
Total word count - document B			0
Total word count - documents A + B			4966

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...ABSTRACT of rice grain- or spindle-shaped precipitated calcium carbonate as a pigment component, the precipitated **calcium carbonate** being **produced** by slaking calcium oxide with a white liquor, followed by causticization with a green liquor...

...SPECIFICATION a digesting chemical. This step comprises (1) a slaking reaction for converting calcium oxide to **hydrated lime**, and (2) a causticizing reaction for mixing **hydrated lime** and green liquor to **form** sodium hydroxide and **calcium carbonate**. A liquid of sodium hydroxide obtained by the causticizing reaction is called a white liquor ...

...calcium carbonate that has been separated, recovered and fully washed with water is used. This **calcium carbonate** is a by-product formed during production of white liquor to be used as a liquor for the pulp...

...is obtained by the conventional method relying on the reaction between milk of lime and **carbon dioxide**.

Furthermore, the rice grain- or spindle-shaped precipitated calcium carbonate defined in the present invention...

...CLAIMS of rice grain- or spindle-shaped precipitated calcium carbonate as a pigment component, said precipitated **calcium carbonate** being **produced** by slaking calcium oxide with a white liquor, followed by causticization with a green liquor...

18/5,K/2

DIALOG(R) File 348:European Patents

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00768680

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**CALCIUM-BASE FILLER AND PROCESS FOR PRODUCING THE SAME**  
**FULLSTOFF AUF KALZIUMBASIS UND VERFAHREN ZUR HERSTELLUNG**  
**CHARGE A BASE DE CALCIUM ET PROCEDE POUR SA PRODUCTION**  
PATENT ASSIGNEE:

MITSUBISHI CHEMICAL CORPORATION, (1852041), 5-2 Marunouchi 2-chome,

Chiyoda-ku, Tokyo 100, (JP), (applicant designated states: DE;GB)  
SHIRAISHI CENTRAL LABORATORIES, CO. LTD., (1363500), 78, 4-chome,  
Motohama-cho, Amagasaki-shi, Hyogo 600, (JP), (applicant designated  
states: DE;GB)

INVENTOR:

KORENAGA, Takashi, 19-16, Naruo-cho 1-chome Nishinomiya-shi, Hyogo 663,  
(JP)

KONDO, Satoshi, 50, Motohama-cho 4-chome Amagasaki-shi, Hyogo 660, (JP)

MORITA, Hiroaki, 3-1-725, Oshokita 4-chome Amagasaki-shi, Hyogo 660, (JP)

SAWANOI, Yoshie, 6-26, Natsugi-cho, Nishinomiya-shi Hyogo 662, (JP)

LEGAL REPRESENTATIVE:

Hansen, Bernd, Dr. Dipl.-Chem. et al (4924), Hoffmann, Eitle & Partner,  
Patentanwalte, Arabellastrasse 4, 81925 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 784071 A1 970716 (Basic)

WO 9609342 960328

APPLICATION (CC, No, Date): EP 95932204 950921; WO 95JP1907 950921

PRIORITY (CC, No, Date): JP 94253061 940921

DESIGNATED STATES: DE; GB

INTERNATIONAL PATENT CLASS: C08K-009/04; C08K-005/00; C01B-035/12;

C01F-011/00; C01F-011/02;

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 960703 A International application (Art. 158(1))

Application: 970716 A1 Published application (A1with Search Report  
;A2without Search Report)

Examination: 970716 A1 Date of filing of request for examination:  
970408

Withdrawal: 971210 A1 Date on which the European patent application  
was withdrawn: 971017

\*Withdrawal: 971217 A1 Date on which the European patent application  
was withdrawn (change): 971016

LANGUAGE (Publication,Procedural,Application): English; English; Japanese

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB97	460
SPEC A	(English)	EPAB97	3774
Total word count - document A			4234
Total word count - document B			0
Total word count - documents A + B			4234

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...SPECIFICATION ashproof agent, and the like.

As for the process for producing them, the process for **producing calcium carbonate** is known (Japanese Patent Publication Nos.37-519, 47-22944, 56-40118), wherein **carbon dioxide** is blown into limemilk which is an aqueous **calcium hydroxide** suspension. The process for producing calcium phosphate is known (Inorganic Phosphorus Chemistry, pages 168-170...

...reacted with an aqueous phosphate solution, or the reaction is carried out under mill after **mixing** them, to produce fine hydroxyapatite which is calcium phosphate. The process for producing calcium sulfoaluminate...

...Open No.53-14692), wherein limemilk and an aqueous solution of aluminum sulfate are instantaneously **mixed** and reacted in the vicinity of 40(degree) C with a **mixing** agitator continuously which operates at a high speed and a high shearing force. The process for producing calcium borate is known (Japanese Patent Publication No.55-50890), wherein boric acid, **calcium hydroxide** and water are directly put into a mill such as a sand mill and a ball mill, or the mixture thereof which is previously **mixed** is put into the mill, thereafter, those are reacted synchronously with milling.

In those processes...

...CLAIMS weight based on 100 parts by weight of said calcium hydroxide.

7. A process for **producing** a composite **calcium carbonate** particles,

which comprises a step wherein a cycloinulooligosaccharide is added to limemilk of which calcium...

18/5,K/3

DIALOG(R) File 348:European Patents

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00578082

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**Process for producing needle-shaped calcium carbonate particles**

**Verfahren zur Herstellung von nadelformigen Calciumcarbonatteilchen**

**Procede pour la production de particules de carbonate de calcium en forme d'aiguille**

PATENT ASSIGNEE:

YABASHI INDUSTRIES CO., LTD., (947030), 188-1, Akasaka-cho, Ogaki-shi  
Gifu-ken, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Inui, Saburo, 1926-2, Fuchu, Tarui-cho, Fuwa-gun, Gifu-ken, (JP)  
Iwashita, Tetsushi, 3-410-20 Aohaka-cho, Ogaki-shi, Gifu-ken, (JP)  
Ota, Yoshio, 971-1, Arao-cho, Ogaki-shi, Gifu-ken, (JP)

LEGAL REPRESENTATIVE:

Liedl, Christine, Dipl.-Chem. (72481), Hansmann & Vogeser Patentanwalte,  
Postfach 70 08 60, 81308 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 581981 A1 940209 (Basic)  
EP 581981 B1 961016

APPLICATION (CC, No, Date): EP 92113193 920803;

PRIORITY (CC, No, Date): EP 92113193 920803

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: C01F-011/18;

CITED PATENTS (EP A): DE 1939608 A; US 4824654 A; US 3197322 A

CITED REFERENCES (EP A):

CHEMICAL ABSTRACTS, vol. 110, no. 10, 6 March 1989, Columbus, Ohio, US;  
abstract no. 78673 f, K. KAMEYAMA ET AL. 'Synthesis and properties of  
needle-like aragonite.' page 186 ;;

ABSTRACT EP 581981 A1

A process for **producing** needle-shaped **calcium carbonate** particles with high efficiency is disclosed. In the process of the invention, a ternary system comprising calcium chloride, magnesium hydroxide and water is reacted with carbon dioxide gas at a temperature not lower than 60 (sup(o)C.

ABSTRACT WORD COUNT: 45

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 940209 A1 Published application (A1with Search Report  
;A2without Search Report)

Examination: 940831 A1 Date of filing of request for examination:  
940706

Change: 950322 A1 Representative (change)

Examination: 950510 A1 Date of despatch of first examination report:  
950329

Grant: 961016 B1 Granted patent

Lapse: 970716 B1 Date of lapse of the European patent in a  
Contracting State: DE 970117

Oppn None: 971008 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	132
CLAIMS B	(English)	EPAB96	113
CLAIMS B	(German)	EPAB96	91
CLAIMS B	(French)	EPAB96	128
SPEC A	(English)	EPABF2	2666
SPEC B	(English)	EPAB96	2818
Total word count - document A			2798

Total word count - document B 3150  
Total word count - documents A + B 5948

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**Process for producing needle-shaped calcium carbonate particles**

...ABSTRACT A1

A process for **producing** needle-shaped **calcium carbonate** particles with high efficiency is disclosed. In the process of the invention, a ternary system...

...SPECIFICATION time.

Method C:

Into a mixture of calcium chloride, magnesium hydroxide and water (material liquid), **carbon dioxide** is blown. The material liquid can be easily prepared by 1) reacting **calcium hydroxide**, magnesium chloride and water, 2) reacting calcium carbonate (limestone), hydrochloric acid and magnesium hydroxide, or 3) **calcium hydroxide**, hydrochloric acid and magnesium hydroxide. Among these, the method 1) is best preferred because magnesium chloride is by-produced in the reaction of **forming** the desired **calcium carbonate** particles, and the by-produced magnesium chloride can be recycled as the starting material of the method 1). Needless to say, the material liquid may also be obtained by merely **mixing** calcium chloride, magnesium hydroxide and water.

In the process of the present invention, it is...

...SPECIFICATION time.

Method C:

Into a mixture of calcium chloride, magnesium hydroxide and water (material liquid), **carbon dioxide** is blown. The material liquid can be easily prepared by 1) reacting **calcium hydroxide**, magnesium chloride and water, 2) reacting calcium carbonate (limestone), hydrochloric acid and magnesium hydroxide, or 3) **calcium hydroxide**, hydrochloric acid and magnesium hydroxide. Among these, the method 1) is best preferred because magnesium chloride is by-produced in the reaction of **forming** the desired **calcium carbonate** particles, and the by-produced magnesium chloride can be recycled as the starting material of the method 1). Needless to say, the material liquid may also be obtained by merely **mixing** calcium chloride, magnesium hydroxide and water.

In the process of the present invention, it is...

...CLAIMS A1

1. A process for **producing** needle-shaped **calcium carbonate** particles comprising reacting a ternary system including calcium chloride, magnesium hydroxide and water with carbon...

18/5,K/4

DIALOG(R)File 348:European Patents

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00494262

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**Porous particles of calcium carbonate and method for the preparation thereof.**

**Porige Calciumkarbonatteilchen und Verfahren zu ihrer Herstellung.**

**Particules poreux de carbonate de calcium et methode pour les preparer.**

PATENT ASSIGNEE:

KOWA CHEMICAL INDUSTRIES CO., LTD., (1371560), No. 3-13, Minami 6-chome, Hounan-cho, Toyonaka-shi, Osaka, (JP), (applicant designated states: DE;FR;GB;IT)

INVENTOR:

Nakajima, Takayuki, 81 15-202, Honjuku-cho, Asahi-ku, Yokohama-shi,



Kanagawa-ken, (JP)  
Kanoh, Masao, 1795, Furuichiba, Saiwai-ku, Kawasaki-shi, Kanagawa-ken,  
(JP)  
Sekiguchi, Isao, 2-26-4, Hijirigaoka, Tama-shi, Tokyo, (JP)  
Iwasaki, Uoshio, 2-30-10, Sannoh, Ohta-ku, Tokyo, (JP)

LEGAL REPRESENTATIVE:

Armengaud Aine, Alain (13671), Cabinet ARMENGAUD AINE 3 Avenue Bugeaud,  
F-75116 Paris, (FR)

PATENT (CC, No, Kind, Date): EP 515757 A1 921202 (Basic)  
EP 515757 B1 950913

APPLICATION (CC, No, Date): EP 91403063 911114;

PRIORITY (CC, No, Date): JP 91151155 910527

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: C01F-011/18;

CITED PATENTS (EP A): EP 386868 A; DE 2741427 A; DE 2759551 B

ABSTRACT EP 515757 A1

A method is proposed for the **preparation** of porous **calcium carbonate** particles of which each of the particles is not an aggregate but has ink bottle-shaped pores each not communicating with the others. The method comprises: (a) **blending** particles of heavy calcium carbonate having a specific particle size distribution with from 0.1 to 0.3% by weight of a porosity-forming agent, e.g., sodium chloride; (b) calcining the powder **blend** at a temperature in the range from 800 (degree)C to 1000 (degree)C to decarbonate the calcium carbonate particles into particles of calcium oxide having pores developed therein; (c) slaking the particles of calcium oxide with steam to convert the calcium oxide particles into particles of **calcium hydroxide**; (d) drying the particles of **calcium hydroxide** at a temperature in the range from 100 (degree)C to 350 (degree)C; and (e) carbonating the dried particles of **calcium hydroxide** with **carbon dioxide** gas at a temperature in the range from 600(degree)C to 750(degree)C.

ABSTRACT WORD COUNT: 159

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 921202 A1 Published application (A1with Search Report  
;A2without Search Report)  
Examination: 930630 A1 Date of filing of request for examination:  
930503  
Examination: 950125 A1 Date of despatch of first examination report:  
941213  
Grant: 950913 B1 Granted patent  
Lapse: 960403 B1 Date of lapse of the European patent in a  
Contracting State: DE 951214  
Lapse: 960724 B1 Date of lapse of the European patent in a  
Contracting State: DE 951214, FR 960209  
Oppn None: 960904 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	283
CLAIMS B	(English)	EPAB95	282
CLAIMS B	(German)	EPAB95	226
CLAIMS B	(French)	EPAB95	292
SPEC A	(English)	EPABF1	2749
SPEC B	(English)	EPAB95	2748
Total word count - document A			3032
Total word count - document B			3548
Total word count - documents A + B			6580

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...ABSTRACT A1

A method is proposed for the **preparation** of porous **calcium carbonate** particles of which each of the particles is not an aggregate but has ink bottle-shaped pores each not communicating with the others.

The method comprises: (a) **blending** particles of heavy calcium carbonate having a specific particle size distribution with from 0.1...

...by weight of a porosity-forming agent, e.g., sodium chloride; (b) calcining the powder **blend** at a temperature in the range from 800 (degree)C to 1000 (degree)C to...

...particles of calcium oxide with steam to convert the calcium oxide particles into particles of **calcium hydroxide**; (d) drying the particles of **calcium hydroxide** at a temperature in the range from 100 (degree)C to 350 (degree)C; and (e) carbonating the dried particles of **calcium hydroxide** with **carbon dioxide** gas at a temperature in the range from 600(degree)C to 750(degree)C.

18/5,K/5

DIALOG(R)File 348:European Patents

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00462863

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**Monodisperse vaterite type** calcium carbonate, its manufacturing method and method of controlling growth of particles and shape thereof.

**Monodisperses Kalziumkarbonat vom Vaterittyp, Verfahren zur Herstellung desselben und Verfahren zur Kontrolle des Teilchenwachstums und der Teilchenform.**

**Carbonate de calcium monodisperse de type vaterite, methode pour fabrication et methode pour controler la croissance des particules et la forme.**

PATENT ASSIGNEE:

MARUO CALCIUM COMPANY LIMITED, (991350), 1455, Nishioka Uozumi-cho, Akashi-shi Hyogo-ken, (JP), (applicant designated states: DE;FR;GB;IT;LU;NL)

INVENTOR:

Minayoshi, Shiro, 126, Yamatedai 1-chome, Ohkubo-cho, Akashi-shi, Hyogo-ken, (JP)

Saito, Naofumi, 1458-1, Kanagasaki, Uozumi-cho, Akashi-shi, Hyogo-ken, (JP)

Hanazaki, Minoru, 210-9, Inaya, Kakogawa-cho, Kakogawa-shi, Hyogo-ken, (JP)

Nishioka, Hidehiko, 753-10, Nishioka, Uozumi-cho, Akashi-shi, Hyogo-ken, (JP)

Kuroda, Sakae, 1-1-123, Kitano, Noguchi-cho, Kakogawa-shi, Hyogo-ken, (JP)

Takahashi, Masako, 1608-121, Kanagasaki, Uozumi-cho, Akashi-shi, Hyogo-ken, (JP)

Shimizu, Seiya, 434-7, Okihama, Aboshi-ku, Himeiji-shi, Hyogo-ken, (JP)

Maida, Norimasa, 1969-6-6, Nishitovoi, Kudamatsu-shi, Yamaguchi-ken, (JP)

LEGAL REPRESENTATIVE:

Patentanwalte Grunecker, Kinkeldey, Stockmair & Partner (100721), Maximilianstrasse 58, D-80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 459399 A1 911204 (Basic)

EP 459399 B1 940817

APPLICATION (CC, No, Date): EP 91108695 910528;

PRIORITY (CC, No, Date): JP 90137482 900528; JP 90137483 900528; JP 9181532 910320

DESIGNATED STATES: DE; FR; GB; IT; LU; NL

INTERNATIONAL PATENT CLASS: C01F-011/18;

CITED PATENTS (EP A): US 3321269 A; EP 179597 A

CITED REFERENCES (EP A):

PATENT ABSTRACTS OF JAPAN vol. 13, no. 585 (C-669)(3933) December 22, 1989 & JP-A-1 246 129 (NITTETSU MINING ) October 2, 1989

PATENT ABSTRACTS OF JAPAN vol. 10, no. 245 (C-368)(2301) August 22, 1986 & JP-A-61 077 622 (YAHASHI KOGYO ) April 21, 1986

PATENT ABSTRACTS OF JAPAN vol. 9, no. 205 (C-299) (1928) August 22, 1985  
& JP-A-60 071 523 (KOGYO GIJUTSUIN ) April 23, 1985  
PATENT ABSTRACTS OF JAPAN vol. 9, no. 233 (C-304) (1956) September 19, 1985  
& JP-A-60 090 818 (KOMESHIYOU SETSUKAI KOGYO ) May 22, 1985  
PATENT ABSTRACTS OF JAPAN vol. 12, no. 338 (C-527) (3185) September 12, 1988  
& JP-A-63 100 011 (SUMITOMO CHEM ) May 2, 1988;

ABSTRACT EP 459399 A1

A monodisperse spherical, ellipsoidal or plate - like vaterite calcium carbonate almost free from secondary aggregation is disclosed. The vaterite type **calcium carbonate** is **prepared** by the steps of adding 5-20 times mol equivalent of water with respect to unslaked lime to a methanol suspension of 0.5-12 weight % of unslaked lime and/or slaked lime (in case of slaked, conversion is to be made into unslaked lime of the same mol) to prepare of a mixture of methanol, unslaked lime and/or slaked lime and water, letting carbon dioxide gas through said mixture, adjusting the temperature in the carbonation reaction system to not less than 30 (degree)C before arrival of conductivity within carbonation reaction system at the maximal point on conductivity variation curve in the carbonation reaction system and adjusting the time from start of carbonation reaction to the point where the conductivity is 100 ( $\mu$ ) S/cm to be less than 1,000 minutes. A method for growing or controlling in shape the vaterite calcium carbonate used as matrix is also disclosed.  
(see image in original document)

ABSTRACT WORD COUNT: 176

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 911204 A1 Published application (A1with Search Report  
;A2without Search Report)  
Examination: 920715 A1 Date of filing of request for examination:  
920519  
Examination: 930915 A1 Date of despatch of first examination report:  
930802  
Grant: 940817 B1 Granted patent  
Oppn None: 950809 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	891
SPEC A	(English)	EPABF1	13355
Total word count - document A			14246
Total word count - document B			0
Total word count - documents A + B			14246

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**Monodisperse vaterite type calcium carbonate , its manufacturing method and method of controlling growth of particles and shape thereof.**

...ABSTRACT plate - like vaterite calcium carbonate almost free from secondary aggregation is disclosed. The vaterite type **calcium carbonate** is **prepared** by the steps of adding 5-20 times mol equivalent of water with respect to...

...SPECIFICATION 84 there is disclosed a method of manufacturing calcium carbonate of vaterite type by blowing **carbon dioxide** gas into a mixed solution of a **calcium hydroxide** aqueous slurry and methanol, and in Japanese Laid-open Patent Publication No. 77622/'86 described is a method of **manufacturing** noncrystalline or crystal **calcium carbonate** of vaterite type or the like by blowing **carbon dioxide** gas into a suspension liquid system of **calcium hydroxide** -water-alcohol.

Although it is possible to obtain vaterite type calcium carbonate at a high...and water. Of these alternatives, the method (5) will be described below in greater detail.

**Carbon dioxide** gas is let through a mixed system of methanol,

matrix vaterite type calcium carbonate and...

...as matrix. At the same time a mixed system of methanol, unslaked lime and/or **slaked lime** and water prepared by adding 3-30 times mol equivalent of water with respect to the quantity of unslaked lime (in case of **slaked lime**, conversion is made into unslaked lime of the same mol) to methanol suspension of unslaked lime and/or **slaked lime** whose converted unslaked lime concentration is 0.5-12 weight % is dripped with the pH...

18/5,K/6

DIALOG(R)File 348:European Patents

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00145455

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**Calcium carbonate in a platelet-like particulate form and a method for the preparation thereof.**

**Plattchenartiges, teilchenformiges Calciumkarbonat und Verfahren zu seiner Herstellung.**

**Carbonate de calcium sous forme de particules en forme de plaquettes et procede pour sa preparation.**

PATENT ASSIGNEE:

OKUTAMA KOGYO KABUSHIKI KAISHA, (639950), 6-8, Nishi-shinjuku 1-chome, Shinjuku-ku Tokyo-to, (JP), (applicant designated states: DE;FR;GB;IT)

INVENTOR:

Tanaka, Hiroichi, 2-1370-107, Negabu, Ome-shi Tokyo-to, (JP)

Matsukawa, Masanori, 10-5, Higashi-ome 4-chome, Ome-shi Tokyo-to, (JP)

Takeshi, Akira, 10-5, Higashi-ome 4-chome, Ome-shi Tokyo-to, (JP)

LEGAL REPRESENTATIVE:

Bizley, Richard Edward et al (28351), BOULT, WADE & TENNANT 27 Furnival Street, London EC4A 1PQ, (GB)

PATENT (CC, No, Kind, Date): EP 140644 A2 850508 (Basic)

EP 140644 A3 870121

EP 140644 B1 900711

APPLICATION (CC, No, Date): EP 84307106 841017;

PRIORITY (CC, No, Date): JP 83193495 831018

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: C01F-011/18; C09C-001/02;

CITED PATENTS (EP A): US 3268387 A; FR 2298512 A; FR 1522415 A

ABSTRACT EP 140644 A2

Calcium carbonate in a platelet-like particulate form and a method for the preparation thereof.

A method for the **preparation** of a **calcium carbonate** powder of which the particles have a platelet-like particulate configuration and which is useful as a pigment or filler in various products with superiority to kaolin clays and mica powders. The method is a two-step carbonation method of a milk of lime of which the first step is performed by blowing **carbon dioxide** into the milk of lime until 10 to 70% of the **calcium hydroxide** is carbonated and the second step is performed by **admixing** the thus partially carbonated milk of lime with an aqueous carbonating solution containing an alkali metal carbonate or ammonium carbonate and an alkali metal hydroxide or ammonium hydroxide in specified concentrations to complete the carbonation of the **calcium hydroxide**. The first step carbonation is preferably preceded by a pretreatment of the milk of lime in which the milk of lime is subjected to shearing disintegration of the **calcium hydroxide** particles to cause a substantial increase of the viscosity up to a specified extent.

ABSTRACT WORD COUNT: 184

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 850508 A2 Published application (Alwith Search Report ;A2without Search Report)

Examination: 860604 A2 Date of filing of request for examination:

860329

Search Report: 870121 A3 Separate publication of the European or  
International search report  
Examination: 871223 A2 Date of despatch of first examination report:  
871105  
Grant: 900711 B1 Granted patent  
Oppn None: 910703 B1 No opposition filed  
Lapse: 911002 B1 Date of lapse of the European patent in a  
Contracting State: FR 901207

LANGUAGE (Publication,Procedural,Application): English; English; English

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...ABSTRACT platelet-like particulate form and a method for the preparation thereof.

A method for the **preparation** of a **calcium carbonate** powder of which the particles have a platelet-like particulate configuration and which is useful...

...method of a milk of lime of which the first step is performed by blowing **carbon dioxide** into the milk of lime until 10 to 70% of the **calcium hydroxide** is carbonated and the second step is performed by **admixing** the thus partially carbonated milk of lime with an aqueous carbonating solution containing an alkali...

...alkali metal hydroxide or ammonium hydroxide in specified concentrations to complete the carbonation of the **calcium hydroxide**. The first step carbonation is preferably preceded by a pretreatment of the milk of lime in which the milk of lime is subjected to shearing disintegration of the **calcium hydroxide** particles to cause a substantial increase of the viscosity up to a specified extent.

?

Set	Items	Description
S1	17146	(CALCIUM OR CA OR MONOCALCIUM) ( ) (CARBONATE OR CO3 OR MONOCARBONATE) OR CALCITE OR CaCO3 OR CARBONIC( )ACID( ) (CALCIUM OR -CA) ( )SALT OR CHALK
S2	4903	(CALCIUM OR CA) ( ) (HYDROXIDE OR OH2 OR HYDRATE OR DIHYDROXIDE) OR CAOH2 OR (HYDRATE? OR SLAKE? OR MILK OR WATER OR H2O) (-N)LIME OR CARBOXYIDE OR HYDRALIME
S3	29924	(CARBON OR C) ( ) (DIOXIDE OR O2 OR OXIDE) OR DRY( )ICE OR CARBONIC( )ACID( ) (ANHYDRIDE OR GAS) OR CARBONIC( )ANHYDRIDE OR CO2
S4	1316	S1(3N) (PRODUC? OR PROD? ? OR GENERAT? OR MANUF? OR MNFG? OR MFG? OR MFR? OR CREAT? OR FORM?? OR FORMING? OR FORMAT? OR MAKE? ? OR MADE? ? OR MAKING?)
S5	380	S1(3N) (SYNTHESI? OR PREPAR? OR PREP? ? OR PRPN?)
S6	875	S1(3N) (PRECIPITAT? OR PPT? OR PPT? ?)
S7	312	S2(3N) (SUSPENS? OR DISPERS? OR COLLOID? OR EMULS? OR MICRO-EMULS? OR SLURR?)
S8	127	S2(3N) SUSPEN?
S9	2501	S1(10N) (AQ? ? OR AQUEOUS OR WATER OR H2O OR LIQ OR LIQUID? OR SOLUTION? OR SOLN? ?)
S10	12	S4-S5(S)S6(S)S7-S8
S11	3	S10(S)S9(S)S3
S12	2	S11 AND S4-S5/TI,AB,CM
S13	171258	MIX OR MIXE? ? OR MIXING OR BLEND? OR ADMIX? OR COMMIX? OR IMMIX? OR INTERMIX? OR DOPE? ? OR DOPING
S14	10998	S13(3N) (SERIES OR MULTI OR MANY OR SEVERAL OR PLURALITY OR MULTITUD? OR MULTIPLE OR PLURIF? OR GROUP? OR SET OR NETWORK? OR SUCCESSION OR SEQUEN? OR CONSECUTIV?)
S15	399	S4-S5(S)S13-S14
S16	16	S15(S)S2(S)S3
S17	7	S16 AND S4-S5/TI,AB,CM
S18	6	S17 NOT S12
S19	9	S4-S5(S)S14
S20	0	S19/TI,AB,CM
S21	24	S4-S5(S)S7-S8(S)S3
S22	5	S21/TI,AB,CM
S23	4	S22 NOT (S12 OR S18)

?t23/5,k/all

23/5,K/1

DIALOG(R) File 348:European Patents

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00791658

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**Process of treating reject from a plant for deinking waste paper**

**Verfahren zur Behandlung des Abfalles aus einer Anlage zum Deinken von Altpapier**

**Procede pour le traitement de dechets d'une installation de desencrage de vieux papier**

PATENT ASSIGNEE:

ECC INTERNATIONAL LIMITED, (287622), 1015 Arlington Business Park,  
Theale, Reading, Berkshire RG7 4SA, (GB), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FI;FR;GB;IT;LI;NL;PT;SE)

INVENTOR:

Bleakley, Ian Stuart, c/o ECC Int. Ltd., Central R&D, Par Moor Road, Par,  
Cornwall PL24 2SQ, (GB)

Toivonen, Hannu Olavi Ensio, c/o ECC Int. Ltd., Central R&D, Par Moor  
Road, Par, Cornwall PL24 2SQ, (GB)

LEGAL REPRESENTATIVE:

McCormack, Derek James (48153), ECC International Ltd, Patents  
Department, c/o John Keay House, St Austell, Cornwall PL25 4DJ, (GB)

PATENT (CC, No, Kind, Date): EP 737774 A1 961016 (Basic)

EP 737774 B1 980325

APPLICATION (CC, No, Date): EP 96302569 960412;

PRIORITY (CC, No, Date): GB 9507710 950413

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; IT; LI; NL; PT; SE

ABSTRACT EP 737774 A1

A method of treating reject from a plant for de-inking waste paper which reject comprises a mixture of ink particles, inorganic particles and fibres includes the step of forming in an aqueous suspension or slurry comprising said reject a precipitate of a substantially white insoluble salt which entrains or aggregates ink particles, inorganic particles and fibres contained in said reject whereby the darkness of the reject is reduced by formation of the precipitate. The precipitate may comprise **calcium carbonate** formed by reacting **carbon dioxide** with **calcium hydroxide** in the said **suspension**. The precipitate and entrained or aggregate material therein may be separated for re-use as a particulate coating or filler material. The said product may be separated from water which after separation is clearer than when originally treated and is recycled for re-use. The said reject may be a slurry or sludge produced from a flotation process of a waste paper de-inking plant.

ABSTRACT WORD COUNT: 176

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 961016 A1 Published application (A1with Search Report ;A2without Search Report)  
 Examination: 961016 A1 Date of filing of request for examination: 960420  
 Change: 961030 A1 Title of invention (German) (change)  
 Examination: 970502 A1 Date of despatch of first examination report: 970311  
 Change: 970618 A1 Representative (change)  
 Grant: 980325 B1 Granted patent  
 Lapse: 980930 B1 Date of lapse of the European patent in a Contracting State: AT 980325  
 Lapse: 981118 B1 Date of lapse of the European patent in a Contracting State: AT 980325, PT 980625  
 Lapse: 981202 B1 Date of lapse of the European patent in a Contracting State: AT 980325, BE 980325, PT 980625

Oppn None: 990317 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9813	449
CLAIMS B	(German)	9813	421
CLAIMS B	(French)	9813	516
SPEC B	(English)	9813	5431
Total word count - document A			0
Total word count - document B			6817
Total word count - documents A + B			6817

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...ABSTRACT darkness of the reject is reduced by formation of the precipitate. The precipitate may comprise **calcium carbonate** formed by reacting **carbon dioxide** with **calcium hydroxide** in the said **suspension**. The precipitate and entrained or aggregate material therein may be separated for re-use as...

...CLAIMS the precipitate.

2. A method as claimed in claim 1 and wherein the precipitate comprises **calcium carbonate** formed by reacting **carbon dioxide** with **calcium hydroxide** in the said **suspension**.
3. A method as claimed in claim 1 and wherein the precipitate and entrained material...

00571425

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**Production of purified calcium carbonate.**

**Herstellung von gereinigtem Calciumcarbonat.**

**Production de carbonate de calcium purifie.**

**PATENT ASSIGNEE:**

PRETORIA PORTLAND CEMENT COMPANY LIMITED, (1615140), 11 Sherborne Road,  
Parktown, 2193, Johannesburg, Transvaal, (ZA), (applicant designated  
states: DE;FR;GB;IT)

**INVENTOR:**

Fouche, Pierre Marc, 63 Kammanassie Street, Brackendowns, Albertonm 1450,  
Transvaal, (ZA)

**LEGAL REPRESENTATIVE:**

Quest, Barry et al (35041), M'CAW & Co. 41-51 Royal Exchange Cross Street  
, Manchester M2 7BD, (GB)

PATENT (CC, No, Kind, Date): EP 558275 A1 930901 (Basic)

APPLICATION (CC, No, Date): EP 93301327 930223;

PRIORITY (CC, No, Date): ZA 921408 920226

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: C01F-011/18; C01F-005/24;

CITED PATENTS (EP A): EP 197327 A; US 3320026 A; GB 1049815 A; FR 2261227 A

**CITED REFERENCES (EP A):**

DATABASE WPIL Week 8645, Derwent Publications Ltd., London, GB; AN  
86-296238/45

DATABASE WPIL Week 8948, Derwent Publications Ltd., London, GB; AN  
89-351298/48;

**ABSTRACT EP 558275 A1**

A method of **producing** relatively pure **calcium carbonate** from a relatively impure source of calcium oxide, characterised in that the method comprises the steps of slaking the calcium oxide source in water to produce an aqueous **hydrated lime slurry** ;

treating the **slurry** by the addition thereto of a water soluble source of anions which anions are capable of forming a salt with calcium ions which salt has a dissociation constant greater than the dissociation constant of calcium hydroxide;

separating the solid content of the slurry from the liquid fraction content thereof to obtain a substantially solids-free solution of calcium ions and anions;

intimately contacting the solids-free liquid fraction with **carbon dioxide** gas at a selected rate to maintain the temperature of the solution within a specific range and to lower the pH of the solution to a pre-set value conducive for the formation of a precipitate of calcium carbonate in which one of the crystalline forms, selected from the group consisting of calcite, vaterite and aragonite, predominates;  
and separating the precipitated calcium carbonate from the mother liquor.

ABSTRACT WORD COUNT: 179

**LEGAL STATUS (Type, Pub Date, Kind, Text):**

Application: 930901 A1 Published application (A1with Search Report  
;A2without Search Report)

Change: 940316 A1 Representative (change)

Examination: 940427 A1 Date of filing of request for examination:  
940228

Examination: 940615 A1 Date of despatch of first examination report:  
940428

Withdrawal: 960515 A1 Date on which the European patent application  
was deemed to be withdrawn: 951123

LANGUAGE (Publication,Procedural,Application): English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	809



SPEC A (English) EPABF1 2604  
Total word count - document A 3413  
Total word count - document B 0  
Total word count - documents A + B 3413

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...ABSTRACT A1

A method of **producing** relatively pure **calcium carbonate** from a relatively impure source of calcium oxide, characterised in that the method comprises the steps of slaking the calcium oxide source in water to produce an aqueous **hydrated lime slurry** ;  
treating the **slurry** by the addition thereto of a water soluble source of anions which anions are capable...

...free solution of calcium ions and anions;

intimately contacting the solids-free liquid fraction with **carbon dioxide** gas at a selected rate to maintain the temperature of the solution within a specific...

...CLAIMS A1

1. A method of **producing** relatively pure **calcium carbonate** from a relatively impure source of calcium oxide, characterised in that the method comprises the steps of slaking the calcium oxide source in water to produce an aqueous **hydrated lime slurry** ;  
treating the **slurry** by the addition thereto of a water soluble source of anions which anions are capable...

...free solution of calcium ions and anions;

intimately contacting the solids-free liquid fraction with **carbon dioxide** gas at a selected rate to maintain the temperature of the solution within a specific...

23/5,K/3

DIALOG(R)File 348:European Patents

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00406896

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**Process for the preparation of basic calcium carbonate, basic calcium carbonate therefrom and its use**

**Verfahren zum Herstellen von basischem Calciumcarbonat, danach hergestelltes basisches Calciumcarbonat und seine Verwendung**

**Procede de preparation de carbonate de calcium basique, carbonate de calcium basique prepare a partir de cette preparation et son utilisation**

PATENT ASSIGNEE:

SCHAEFER KALK Kommanditgesellschaft, (1170250), Louise-Seher-Strasse 6,  
D-65582 Diez, (DE), (applicant designated states:  
AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

Grothe, Johanna, Schulstrasse 53, D-6251 Bierlenbach, (DE)

LEGAL REPRESENTATIVE:

Rupprecht, Klaus, Dipl.-Ing. (9851), Kastanienstrasse 18, D-61476  
Kronberg, (DE)

PATENT (CC, No, Kind, Date): EP 429707 A1 910605 (Basic)  
EP 429707 B1 960327

APPLICATION (CC, No, Date): EP 89122027 891129;

PRIORITY (CC, No, Date): EP 89122027 891129

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C01F-011/18;

CITED PATENTS (EP A): GB 2145074 A; EP 55088 A

CITED REFERENCES (EP A):

CHEMICAL ABSTRACTS

PATENT ABSTRACTS OF JAPAN

## ABSTRACT EP 429707 A1 (Translated)

A process is described by means of which it is possible to **prepare** stable, basic **calcium carbonate** of determinable crystal structure on a large industrial scale. The process according to the invention is distinguished by the fact that an aqueous **suspension** of **calcium hydroxide** is carbonatised by addition of **CO<sub>2</sub>** ), defined temperatures of the suspension in the range from 2 to 50 C are maintained during this carbonatisation, and the carbonatisation is then completed at a molar calcium carbonate ratio of 3 : 2 or 6 : 5. Depending on the initial temperature of the suspension, platelet-like, rod-like or fibrous calcium carbonate, **calcium carbonate** of somatoidal crystal **form** or even basic **calcium carbonate** having comparatively large rhombohedra are obtained.

The products obtained by the process according to the invention, to which the invention is also directed, are, owing to their structure, suitable in particular for the use in paper production, for emulsion paints, fillers for plastics, rubber, synthetic resins, etc.

TRANSLATED ABSTRACT WORD COUNT: 162

## ABSTRACT EP 429707 A1

Es wird ein Verfahren beschrieben, mit dem es möglich ist bestandiges, basisches Calciumcarbonat bestimmbarer Kristallstruktur im grostechnischen Masstab herzustellen. Das erfindungsgemase Verfahren zeichnet sich dadurch aus, das man eine wassrige Suspension von Calciumhydroxid durch Zugabe von CO(sub 2) carbonatisiert, hierbei definierte Temperaturen der Suspension im Bereich von 2 bis 50(degree)C einhalt und dann die Carbonatisierung bei einem Calcium-Carbonat-Molverhaltnis von 3 : 2 oder 6 : 5 beendet. Je nach Ausgangstemperatur der Suspension erhalt man plattchenformiges, stabchen- oder faserformiges Calciumcarbonat, solches somatoider Kristallform und auch basisches Calciumcarbonat mit vergleichsweise grossen Rhomboedern.

Die mit dem erfindungsgemassen Verfahren hergestellten Produkte, auf die die Erfindung ebenfalls gerichtet ist, eignen sich aufgrund ihrer Beschaffenheit insbesondere zur Verwendung bei der Papierherstellung, fur Dispersionsfarben, Fullstoffe fur Kunststoffe, Gummi, Kunstharze etc.

ABSTRACT WORD COUNT: 127

## LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	910605 A1	Published application (A1with Search Report ;A2without Search Report)
Examination:	920318 A1	Date of filing of request for examination: 920118
Examination:	920617 A1	Date of despatch of first examination report: 920506
*Assignee:	950823 A1	Applicant (name, address) (change)
Grant:	960327 B1	Granted patent
Lapse:	961030 B1	Date of lapse of the European patent in a Contracting State: SE 960627
Lapse:	961227 B1	Date of lapse of the European patent in a Contracting State: BE 960327, SE 960627
Lapse:	970319 B1	Date of lapse of the European patent in a Contracting State: BE 960327, FR 960823, SE 960627
Oppn None:	970319 B1	No opposition filed
Lapse:	970402 B1	Date of lapse of the European patent in a Contracting State: BE 960327, FR 960823, GB 960327, SE 960627
Lapse:	980121 B1	Date of lapse of the European patent in a Contracting State: BE 960327, CH 961130, LI 961130, FR 960823, GB 960327, SE 960627
Lapse:	980121 B1	Date of lapse of the European patent in a Contracting State: BE 960327, CH 961130, LI 961130, FR 960823, GB 960327, SE 960627
Lapse:	980408 B1	Date of lapse of the European patent in a

Contracting State: AT 961129, BE 960327, CH  
961130, LI 961130, FR 960823, GB 960327, SE  
960627

LANGUAGE (Publication,Procedural,Application): German; German; German  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(German)	EPABF1	596
CLAIMS B	(English)	EPAB96	1018
CLAIMS B	(German)	EPAB96	839
CLAIMS B	(French)	EPAB96	1029
SPEC A	(German)	EPABF1	2357
SPEC B	(German)	EPAB96	2334

Total word count - document A 2953

Total word count - document B 5220

Total word count - documents A + B 8173

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...ABSTRACT Translated)

A process is described by means of which it is possible to **prepare** stable, basic **calcium carbonate** of determinable crystal structure on a large industrial scale. The process according to the invention is distinguished by the fact that an aqueous **suspension** of **calcium hydroxide** is carbonatised by addition of CO<sub>2</sub> ), defined temperatures of the suspension in the range from 2 to 50 C are maintained...

...on the initial temperature of the suspension, platelet-like, rod-like or fibrous calcium carbonate, **calcium carbonate** of somatoidal crystal **form** or even basic **calcium carbonate** having comparatively large rhombohedra are obtained.

The products obtained by the process according to the...

23/5,K/4

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**Protection composition for bottom sub-units and method for its preparation.**

**Unterbodenschutzmasse und Verfahren zu deren Herstellung.**

**Composition de protection de bas de caisse et son procede de preparation.**

PATENT ASSIGNEE:

DEUTSCHE SOLVAY-WERKE GMBH, (226252), Langhansstrasse 6, D-42697 Solingen  
, (DE), (applicant designated states:

AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

Aumann, Gerd, Dr.Dipl.-Chem., Wolfhagenstrasse 15, D-4234 Alpen-Veen,  
(DE)

Klatte, Gerd, Dr.Dipl.-Chem., Sedanstrasse 12, D-4134 Rheinberg, (DE)

Korte Hans-Jurgen, Dr.Dipl.-Chem., Geibelstrasse 9, D-4000 Dusseldorf 1,  
(DE)

LEGAL REPRESENTATIVE:

Lauer, Dieter, Dr. (7384), c/o Solvay Deutschland GmbH Hans-Bockler-Allee  
20, D-30173 Hannover, (DE)

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EP 325114 A3 910703

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DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE

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CITED REFERENCES (EP A):

WPIL, FILE SUPPLIER Derwent Publications Ltd., London, GB;

& JP-A 62-84175 (NISSAN MOTOR KK, NIPPON GOMU KK) 8.10.1985;

ABSTRACT EP 325114 A2 (Translated)

The present invention relates to an underfloor sealing composition for motor vehicles, containing at least one finely divided vinyl chloride homopolymer, copolymer, terpolymer or graft polymer, at least one plasticiser, at least one stabiliser, at least one filler or filler mixture based on calcium carbonate, and at least one adhesion promoter and/or one other auxiliary or additive substance, and also optionally at least one dye, one colour pigment, one solvent and/or diluent medium, characterised in that all or some of the filler, preferably the calcium carbonate, or the filler mixture, preferably the calcium carbonate contained in the filler mixture, have been provided with from 0.3 to 12% by weight, preferably from 1 to 5% by weight (based on 100 parts by weight of the surface-treated calcium carbonate) of a saturated and/or unsaturated, not only at least monocarboxylic but also polar - because it contains at least one polar group - carboxylic acid, dicarboxylic acid, fatty acid, substituted fatty acid, a salt of this compound or fatty acid derivative, preferably at least one hydroxyl-, carbonyl-, carboxyl-, ether- and/or amino-containing aliphatic saturated and/or unsaturated monocarboxylic acid or fatty acid or at least one salt of this monocarboxylic acid which contains at least one polar group and is C to C , preferably C to C , arranged on all or some of the surface of the filler or filler mixture, preferably the calcium carbonate.

TRANSLATED ABSTRACT WORD COUNT: 231

ABSTRACT EP 325114 A2

Die vorliegende Erfindung betrifft eine Unterbodenschutzmasse für Kraftfahrzeuge, enthaltend mindestens ein feinteiliges Vinylchloridhomo-, -co-, -ter- oder -pfropfpolymerisat, mindestens einen Weichmacher, mindestens einen Stabilisator, mindestens einen Fullstoff auf der Basis von Calciumcarbonat oder ein Calciumcarbonat enthaltendes Fullstoffgemisch und mindestens einen Haftvermittler und/oder einen anderen Hilfs- oder Zusatzstoff, sowie ggf. mindestens einen Farbstoff, ein Farbpigment, ein Lose- und/oder Verdünnungsmittel, dadurch gekennzeichnet, das ein Teil oder der gesamte Fullstoff, vorzugsweise das Calciumcarbonat oder das Fullstoffgemisch, vorzugsweise das im Fullstoffgemisch enthaltene Calciumcarbonat, mit 0,3 bis 12 Gew.-%, vorzugsweise 1 bis 5 Gew.-% (bezogen auf 100 Gewichtsteile des oberflächenbehandelten Calciumcarbonates) einer gesättigten und/oder ungesättigten, neben mindestens einer -COOH Gruppe mindestens eine polare Gruppe enthaltenden Carbonsäure, Dicarbonsäure, Fettsäure, substituierten Fettsäure, einem Salz dieser Verbindung oder Fettsäurederivat, vorzugsweise mindestens eine Hydroxyl-, Carbonyl-, Carboxyl-, Ether- und/oder Aminogruppe enthaltenden aliphatischen gesättigten und/oder ungesättigten Monocarbonsäure oder Fettsäure oder mindestens einem Salz dieser mindestens eine polare Gruppe enthaltenden Monocarbonsäure mit C(sub 2) bis C(sub 3)(sub 2), vorzugsweise C(sub 1)(sub 0) bis C(sub 2)(sub 2), versehen ist, die bzw. das auf der Oberfläche oder auf einem Teil der Oberfläche des Fullstoffes oder Fullstoffgemisches, vorzugsweise des Calciumcarbonates, angeordnet ist.

ABSTRACT WORD COUNT: 190

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Change:	910807 A2	International patent classification (change)
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\*Assignee: 960103 B1 Proprietor of the patent (transfer of rights):  
Deutsche Solvay-Werke Gesellschaft mit  
beschränkter Haftung (226253)  
Hans-Bockler-Allee 20 30173 Hannover (DE)  
(applicant designated states:  
AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

\*Assignee: 960103 B1 Previous applicant in case of transfer of  
rights (change): DEUTSCHE SOLVAY-WERKE GMBH  
(226252) Langhansstrasse 6 D-42697 Solingen  
(DE) (applicant designated states:  
AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

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Lapse: 970709 B1 Date of lapse of the European patent in a  
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Available Text	Language	Update	Word Count
CLAIMS A	(German)	EPABF1	1216
CLAIMS B	(English)	EPAB95	1762
CLAIMS B	(German)	EPAB95	1351
CLAIMS B	(French)	EPAB95	1988
SPEC A	(German)	EPABF1	2636
SPEC B	(German)	EPAB95	2673

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...CLAIMS Claims 1 to 8, characterised in that the underseal composition  
contains a synthetic surface-coated **calcium carbonate**, preferably  
**produced** by introducing **carbon dioxide** into a **calcium**  
**hydroxide suspension** and by subsequent surface treatment of the  
**calcium carbonate produced** with an alkali or ammonium salt of a  
saturated or unsaturated carboxylic acid, dicarboxylic acid...

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